METHOD AND APPARATUS FOR EXPLORING AN EXPERIMENTAL SPACE

ABSTRACT

A hybrid learning system is provided for searching an experimental space. A data mart is configured to acquire, store, and manipulate a set or meta-set of data including at least historical experimental data, descriptor data, and concurrent experimental data. A search engine is designed to use unsupervised learning techniques to select a set of evaluation points representing a corresponding set of experiments to be run, based on data from the data mart. A point evaluation mechanism provided with supervised learning modules which perform predictive processing based on the evaluation points selected by the search engine, and a scoring module performs a rating operation on outputs of the learning modules to rate the outputs of the learning modules from best to worst. The data mart search engine and point evaluation mechanism allow for a repetitive processing to refine an output of potential solutions without the requirement of continually running actual physical experiments.